45TH TURBOMACHINERY & 32ND PUMP SYMPOSIA
HOUSTON, TEXAS | SEPTEMBER 12 – 15, 2016
GEORGE R. BROWN CONVENTION CENTER

Short Course T8: Gas Turbines – Fundamentals of Design, Operation, and Maintenance

Meherwan P. Boyce is Chairman of The Boyce Consultancy Group, LLC, in Houston, Texas. He has 40 years of experience in the turbomachinery field, with 30 years in the design of compressors and turbines. His 15 years in academia include being Professor of Mechanical Engineering at Texas A&M University, and Founder of the Turbomachinery Laboratories and the Turbomachinery Symposium. Dr. Boyce has authored more than 130 technical publications and several books, including Gas Turbine Engineering Handbook, Cogeneration & Combined Cycle Power Plants, and Centrifugal Compressors, A Basic Guide. He has taught over 150 short courses globally attended by over 4500 students representing 400 companies, and is a Consultant to the aerospace, petrochemical, and utility industries. Dr. Boyce received a B.S. and M.S. degree (Mechanical Engineering) from the South Dakota School of Mines and Technology and the State University of New York, respectively, and a Ph.D. degree (1969) from the University of Oklahoma.

Francisco Gonzalez works for Cheniere Energy in Houston, Texas. Mr. Gonzalez has over two decades of experience in Operations and Maintenance of Rotating Equipment. Mr. Gonzalez has co-authored several technical papers for Turbomachinery Symposia and ASME Power Gen as well as articles on Improving Reliability in various publications. Mr. Gonzalez graduated from the University of Houston with a Bachelor's degree in Mechanical Engineering in 1990.

The course covers the new advanced technology gas turbines by outlining all the major components of gas turbines, such as axial flow compressors, axial flow turbines, and dry low NOx combustors. The components of a gas turbine will be addressed from a design, operation, and maintenance point of view as well as their effect on plant operation, plant availability, and reliability. Also covered will be the best practices in operating the new advanced technology gas turbines at variable loads obtaining best efficiencies with minimal down time. Attendees receive a copy of Dr. Boyce's *Gas Turbine Engineering Handbook*.